BEST AVAILABLE COTY



Patent

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In repatent application of: FOSTER et al.

Serial No.: 09/679,643

Filed: October 5, 2000

For: S. AUREUS FIBRINOGEN BINDING PEIN GENE

DECEMEN

Examiner:

Art Unit: 1645 JAN 23 2001

Docket No.: TECH CENTER 1600/2900

P06282US02/BAS

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §1.98(d)

(For a Continuing Application other than a Rule 53d "Continued Prosecution Application")

Assistant Commissioner for Patents Washington, D.C.

SIR:

Please consider and make of record pursuant to 37 C.F.R. §1.97-1.98 the information previously cited by or submitted to the Office in the prior application(s) relied on for an earlier filing date under 35 U.S.C. §120.

The following listing(s) of such information are attached hereto (check as appropriate):

X Form(s) PTO 892 listing information cited by the Office.

X Form(s) PTO 1449 or FB-A820 listing information cited to the Office.

The prior application(s) is(are) identified in the application papers and in the enclosed listing form(s).

Favorable consideration is respectfully requested.

Respectfully submitted,

Date: 19 January 2001

By: B. Aaron Schulman

Registration No.: 31,877

LARSON & TAYLOR, PLC • 1199 North Fairfax St. • Suite 900 • Alexandria, VA 22314

RECEIVED

		500 JAN 23 2001				
PTO Form 1	449	U.S. Department of Comperce Attorney Docket No.: Patent and Trademark Office P-9050-24420 Serial No.: Not Yet Assigned TECH CENTER 1600/2900				
		INFORMATION DISCLOSURE CITATION Applicant: Timothy James FOSTER et al.				
		Sheet 1 of 3 Ing Date: Concurrently Herewith Group: Not Assigned				
Examiner Initials		OTHER DOCUMENTS (Cactuding Author, 16/tle, Date, Pertinent Pages, etc.)				
Vo	м	Amann, E. and Brosius, J. (1985). "AREMANDORS' for regulated high level expression of cloned genes in Esherichia coli." Gene 40, 183-190.				
1	АВ	Baier, R.E. (1977). " The organisation of blood components near interfaces." Ann N.Y. Acad Sci 283:17-36.				
	AC	Boden, M.K., and Flock, J.1. (1989). "Fibrinogen-binding protein/clumping factor from <u>Staphylococcus aureus</u> ." Infect. Immun. 57: 2358-2363.				
	AD	Boden, M.K., and Flock, J.I. (1992). "Evidence for three different fibringen binding proteins with unique properties from <u>Staphylococcus aureus</u> strain Newman." Microbiol. Pathogen., 12(4), 289-298.				
	AE	Boden, M.K., and Flock, J.I. (1994). "Cloning and characterization of a gene for a 19kDa Fibrinogen-binding protein from <u>Staphylococcus aureus</u> ." Molec. Microbiol. 12(4), 599-606.				
	AF	Chhatwal, G.S., Albohn, G. and Blobel, H. (1987). "Interaction between fibronectin and purified staphyococcal clumping factor." FEMS Microbiol. Lett. 44, 147-151.				
	AG	Cheung, A. and fischetti, V.A. (1990). "Role of surface proteins in staphylococcal adherence to catheters in vitro." J. Infect. Dis. 161, 1177-1186.				
	AH	Cheung, A.L. Kirshnan, N., Jaffe, E.A. and Fischetti, V.A. (1991). "Fibrinogen acts as a bridging molecule in the adherence of <u>Staphylococcus aureus</u> to cultured human endothelial cells." J. Clin. Invest. 87, 2236-2245.				
	ΑI	Cheung, A.L., Yeaman, M.R. Sullam,, P.M., Witt, M.D. and Bayer A.S. (1994). "Role of the <u>sar</u> locus of <u>Staphylococcus aureus</u> in induction of endocarditis in rabbits." Infect. Immun. 62, 1719-1725.				
	AJ	Cottonaro, C.N. Roohk, H.V., Shimica, G. and Sperling, D.R. (1981). "Quantitation and characterization of competitive protein binding to polymers." Trans Am. Soc. Artif. Inter. Organs 27:391-395.				
	AK	Davidson, V.E., and Sandford, B.A. (1982). "Factors influensing adherence of <u>Staphylococcus aureus</u> to Influenza A virus-infected cell cultures." Infect. Immun, 37:946-955.				
	AL	Duthie, E.S. (1954). "Evidence of two forms of staphlococcal coagulase." J. Gen. Microbiol. 10:427-436.				
	АН	Espersen, F., Clemmensen, I., and Barkholt, V. (1985). "Isolation of <u>Staphylococcus aureus</u> clumping factor." Infect. Immun. 49:700-708.				
EXAMINER:	Dr	nitial if reference considered, whether or not citation is in conformance with HPEP 609. raw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applica				
**Copies of	ref	ferences not provided at the time of this submission.				



JAN 23 7nns

PTO Form 144	U.S. Department of Commence Attorney Docket No.: Serial No.: Patent and Trademark Office P-9050-24420 (5 Not Yet Assigned				
	INFORMATION DISCLOSURE CITATION (A) Policant: Timothy James FOSTER et al.				
	Sheet 2 of 3 JAN 1 9 2001 Filing Date: Concurrently Herewith Group: Not Assigned				
Examiner Initials	OTHER DOCUMENTS (Action Author) Title, Date, Pertinent Pages, etc.)				
	Garrison, P.K. and Freedman, L.R. (1970). "Experimental endocarditis. 1. Staphylococcal endocarditis in rabbits resulting from placement of a polyethylene catheter in the right side of the heart." Yale J. Biol. Med. 42, 394-410.				
1	Guan, K. and J.E. Dixon. (1991). "Eukaryotic proteins expressed in <u>Escherichia coti</u> : An improved thrombin ocleavage and purification procedure of fusion proteins with glutathione S-transverse." Anal. Biochem. 192, 262-267.				
1	Hawiger, J.S., Hammond, D.K., Timmons, S. and Budzynski, A.Z. (1978). "Interaction of human fibrinogen with staphylococci: presence of a binding region on a normal and abnormal fibrinogen variants and fibrinogen Blood 51:799-812.				
	Hawiger, J.S., Timmons, S., Strong, D.D. Cottrell, B.A., Riley, H., and Doolittle, R.F. (1982). "Identification of a region of human fibrinogen interacting with staphylococcal clumping factor." Biochemistry 21:1407-1413.				
A	Herrmann, M., Lai, Q.J., Albrecht, R.M., Mosher, D.F. and Proctor, R.A. (1993). "Adhesion of a <u>Staphylococcus</u> aureus to surface-bound platelets: role of fibrinigen/fibrin and platelet integrins." J. Infect. Dis. 167, 312-322.				
A	Homonylo McGavin, M., Krajewska-Pietrasik, D., Ryden, C. and Hook, M. (1993). "Identification of a Staphylococcus aureus extracellular matrix-binding protein with broad specificity." Infect. Immun. 61, 2479-2485.				
	Kochwa, S., Litwak, R.S. Rosenfield, R.E. and Leonard, E.F. (1977). "Blood elements at foreign surfaces: a biochemical approach to study the absorption of plasma proteins." Ann. NY Acad Sci 238, 27-49.				
1	Kristinsson, K.G. (1989). "Adherence of staphylococci to intravascular catheters." J. Med. Microbiol. J 28:249-257.				
	Lantz, M.S., Allen, R.D., Bounelis, P., Switzalski, L.M. and Hook, M. (1990). " <u>Bacteriodes gingivatis</u> and <u>Bacteriodes intermedius</u> recognize different sites on human fibrinogen." J. <u>Bacteriol.</u> 172, 716-726.				
	Lee, C.Y., Buranem, S.L. and Ye, Z-H. (1991). "Construction of single copy integration vectors for Staphylococcus aureus. Gene 103:101-105.				
1	McDevitt, D., Vaudaux P. and Foster, T.J. (1992). "Genetic evidence that bound coagulase of Staphylococcus aureus is not clumping factor." Infect. Immun. 60:1514-1523.				
	McDevitt, D., Francois, P., Vaudaux, P. and Foster T.J. (1994). "Molecular characterization of the fibrinogen recepter (clumping factor) of <u>Staphylococcus aureus</u> . Molec, Microbiol. 11, 237-248.				
\ \	Maki, D.G. (1992). "Infections associated with intravascular lines." In <u>Current topics in infectious diseases</u> , 2 Vol. 3 Remington J.S., and Swartz, M.N. (eds.). McGraw Hill, New York, pp. 309-363.				
	Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.				
**Copies of r	eferences not provided at the time of this submission.				

Molon

RECEIVED

JAN 23 2001

P10 Form 1449		U.S. Department of Commerce Attorney Docket No.: Patent and Trademark Office P-9050-24420	TECH CENTER 1500/2500 Not Yet Assigned			
		INFORMATION DISCLOSURE CITATION AND 1 9 2001 W Applicant: Timothy James FOSTE	R et al.			
	-	Sheet 3 of 3 Filing Date: Concurrently Here	with Group: Not Assigned			
Examiner Initials		OTHER DOCUMENTS Concluding Anthor, Title, Date, Pertinent Pages, etc.)				
$\sqrt{\wedge}$	Immunofluorescence study of					
	вв	Patel, A.H., Nowlan, P. Weavers, E.D. and Foster, T.J. (1987). "Virulence of proteoxin-deficient mutants of <u>Staphylococcus aureus</u> isolated by allelic-replacement."	ein A-deficient and alpha " Infect. Immun. 55,3103-3110			
	вс	Patti, J.M., Jonsson, H., Guss, B., Switalski, L.M., Wiberg, K., Lindberg, M. and Characterization and expression of a gene encoding a <u>Staphylococcus aureus</u> collag. 267, 4766-772.	Hook H. (1992). "Molecular en adhesin." J. Biol. Chem.			
	60	Schneewind, O., Mihaylova, D. and Model, P. (1993). "Cell wall sorting signals in surface proteins of Gram-positve bacteria." EMBO J.12, 4803-4811.				
	BE	Signas, C., Raucci, G., Jonsson, K., Lindgren, P.E., Anantharamaiah, G.M., Hook, M. (1989). "Nucleotide sequence of the gene for a fibronectin-binding protein from <u>S</u> this peptide sequence in the synthesis of biologically active peptides." Proc. Na	taphylococcus aureus: use of			
	BF	Switalski, L.M. (1976). "Isolation and purification of staphylococcal clumping fa staphylococcal diseases." Jeljaszewicz, J. (ed.) Gustav Fischer Verlag, Stuttgart	ctor." In <u>Staphylococci</u> and , pp. 413-425.			
	8G	Tomich, P.K., An, F.Y, and Clewell, D.B. (1980). Properties of erythromycin induc- Streptococcus faecalis. J.Bacteroil. 141, 1366-1374.	ible transposon In <u>917</u> in			
	BH	Usui, Y. (1986). "Biochemical properties of fibrinogen binding protein (clumping scell surface." ZóL Bakt. Hyg. AZó2, 287-297.	factor) of the staphylococcal			
	BI	Vaudaux, P. Pittet, D. Haeberli, A., Huggler, E., Nydegger, U.E., Lew, D.P. and Wa "Host factors selectively increase staphylococcal adherence on inserted catheters fibrinogen or fibrin." J. Infect. Dis. 160, 865-875.				
	BJ	Vaudaux, P., Proctor, R.A., McDevitt, D., Foster, T.J., Lew, D.P., Wabers, H. and adherence defective mutants of <u>Staphylococcus aureus</u> (SA) to identify adherence proceeding profusing blood Program Abstr. 31st Intersci. Conf. Antimicrobiol. Agen	romoting proteins deposited			
	8K	Vaudaux, P., Pittet, D., Haeberli, H. Lerch, P.G., Morgenthaler, J.J., Proctor, R. D.P. (1993). "Fibronectin is more active than fibrin or fibrinogen in promoting adherence to inserted intravascular devices." J. Infect, Dis. 167, 633-641.				
	BL	Yanisch-Perron, C., Veira, J.C. and Messing, J. (1985). "Improved M13 phage cloning nucleotide sequences of the M13mp18 and pUC19 vectors." Gene 33:103-119.	ng vectors and host strains:			
	вн	Yougman, P. (1985). "Plasmid vectors for recovering and exploiting In <u>917</u> transpos Gram-positives." In Plasmids: a Practical approach. Hardy, K. (ed.), IRL Press, Or				
EXAMINER:	Dr	nitial if reference considered, whether or not citation is in conformance with MPEF raw line through citation if not in conformance and not considered, solude copy of this form with next communication to Applicant.	609.			

Mold)